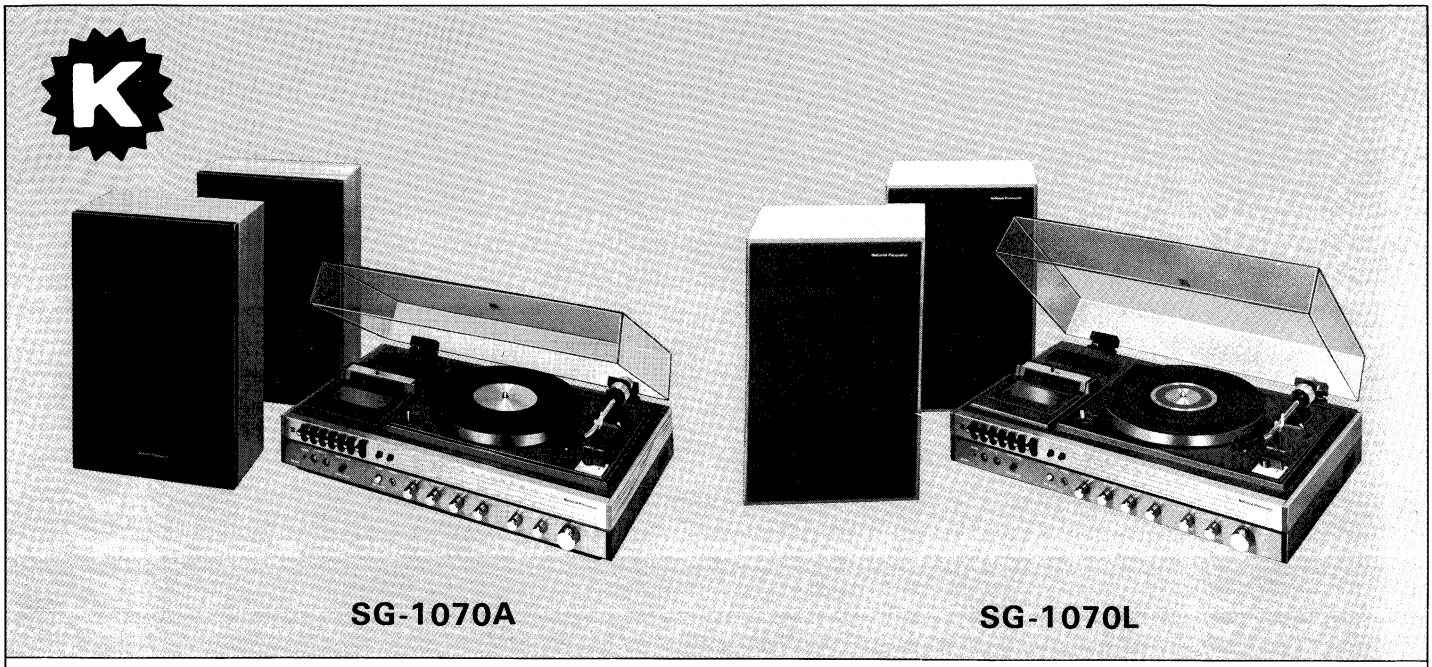
ORDER NO. TSD-7407-226

Service Manual

National
COMPACT STEREO
Panasonic



MODELS SG-1070A/1070L

SPECIFICATIONS (For SG-1070L)

AMPLIFIER SECTION

Power Output:	MPO 18W x 2 RMS 12W/Channel (4Ω) 8W/Channel (8Ω) RMS 10W/Channel (4Ω THD 1%) 7W/Channel (8Ω THD 1%)
Frequency Response:	25Hz~50kHz, -3dB
Input Sensitivity and Impedance: AUX;	100mV, 100kΩ
TAPE;	600mV, 50kΩ ⊐ DIN (1070L only)
REC OUT and Impedance:	0.1~2mV/kΩ ⊐ DIN (1070L only)
Tone Control: BASS;	±9dB at 100Hz
TREBLE;	+8dB -14dB at 10kHz

FM TUNER SECTION

Frequency Range:	87.5MHz~108MHz (3.43~2.78m)
Intermediate Frequency (IF):	10.7MHz
Sensitivity:	2.5μV (40kHz deviation S/N 30dB)
Frequency Response:	25Hz~15kHz, -3dB
Harmonic Distortion:	0.4% 1kHz (mono) 30% mod.
Signal to Noise Ratio:	62dB (mono) (100% mod.)
Stereo Separation:	35 dB
Image Ratio:	43dB at 98MHz
Antenna Terminal:	300Ω Balanced

AM TUNER SECTION

Frequency Range:	MW;525kHz~1605kHz (571~187m) LW;145kHz~285kHz (2070~1050m)
Intermediate Frequency (IF):	455kHz (470kHz:UK)
Sensitivity:	MW; 130μV/m for 50mW LW; 350μV/m for 50mW
Antenna:	MW built-in ferrite ant. LW built-in ferrite ant.

RECORD PLAYER SECTION

Turntable:	25cm (10")
Turntable Speeds:	33-1/3 and 45 rpm
Phonomotor:	National 2-pole AC motor
Cartridge:	Ceramic (EPC05STAD)
Stylus:	Diamond (EPS36STSD)

TAPE DECK SECTION

Deck System:	Auto-Stop Cassette System
Track System:	2 CH 4-Track
Recording System:	AC Bias 50kHz
Erasing System:	AC Erase
Tape Speed:	4.8cm/sec (1-7/8 i.p.s.)
Frequency Response:	60Hz~10kHz

SPEAKER

Speaker:	16cm Woofer and 5cm Tweeter
Input Impedance:	8Ω

POWER SUPPLY: AC 100-115V, 115-130V, 200-225V, 225-250V, 50Hz

POWER CONSUMPTION: 41W

DIMENSIONS: (W x H x D)

Center Unit:	571mm x 185mm x 393mm (22-31/64") (7-9/32") (15-15/32")
Speaker System:	

WEIGHT

Center Unit:	9.9kg (21 lbs. 13OZ)
Speaker System:	

SPECIFICATIONS (For SG-1070A)

AM TUNER SECTION

Frequency Range:	SW 5.9MHz~18MHz (50.8~16.7m)
Sensitivity:	SW 50μV/m for 50mW

Note: All other specifications not described here are same with SG-1070L's specifications.

Matsushita Electric
Matsushita Electric Trading Co., Ltd.
P. O. Box 288, Central Osaka, Japan

DISASSEMBLY INSTRUCTIONS

■ To Remove Record Player

1. Remove turntable.
2. Remove a record player mounting screw No. 1 as shown in Fig.1.
3. Lift player slightly back and slide it toward rear of cabinet.
4. To reassemble, reverse above procedure.

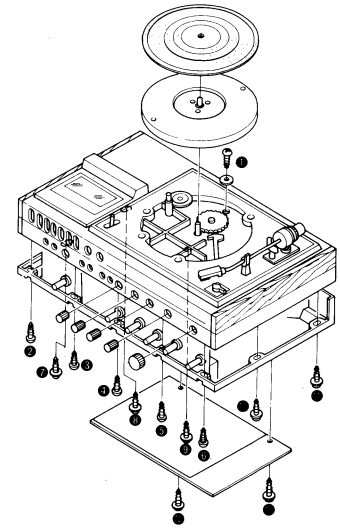


Fig. 1

■ To Replace Components

1. Remove record player.
2. Remove two (2) bottom board mounting screws Nos. 12~13, as shown in Fig.1.
3. Unsolder faulty components and replace with new one.

* Most components can be replaced in this manner. However, when it becomes necessary for you to remove, the chassis, follow these instructions,

a) remove six knobs on the front panel.
b) remove ten (10) cabinet mounting screws Nos.2~11, as shown in Fig. 1.
c) remove cabinet from chassis.

4. To reassemble, reverse above procedure.

CAUTION

To Remove Cabinet;

* Lift cabinet in the direction of arrow A, as shown in Fig.2.

To Reassemble Cabinet;

* Incline cabinet about 20 degrees. Fit mike jack and headphone jack to their respective holes on the front panel, and push cabinet in the direction of arrow B, as shown in Fig.2.

* Make sure the cabinet does not touch the pinch roller or eject lever on the tape deck.

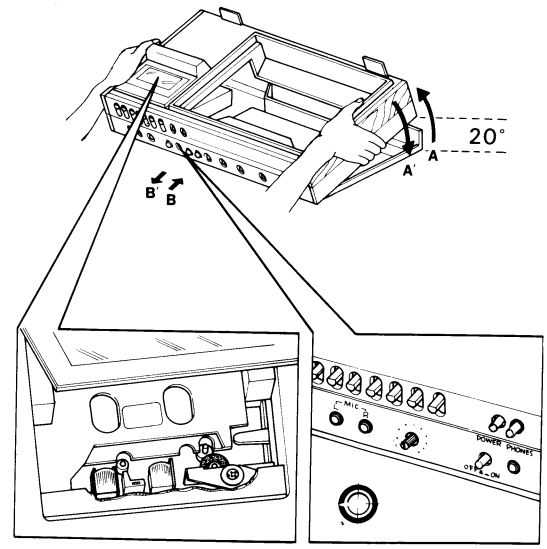


Fig. 2

■ To Replace Cartridge

1. To remove cartridge, push it in the direction of arrow A, as shown in Fig.3.
2. To install cartridge, push it in the direction of arrow B, as shown in Fig.3.

* The cartridge should be perpendicular with the head shell (pickup) and it should be installed straight upward, observing that its edge is in line with the head shell.

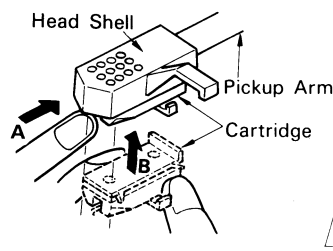


Fig. 3

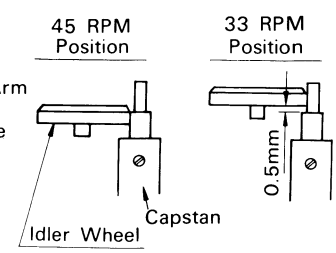


Fig. 4

■ To Replace Capstan

* When replacing capstan, carefully set its edge to the idler wheel basing on two positions, as shown in Fig. 4.

■ To Remove Cassette Tape Deck

1. Refer to above cabinet removal procedure.
2. Unplug two (2) 6P connector and a 3P plug.
3. Remove five (5) cassette deck mounting screws Nos.1~5, as shown in Fig.5.
4. To reassemble, reverse above procedure.

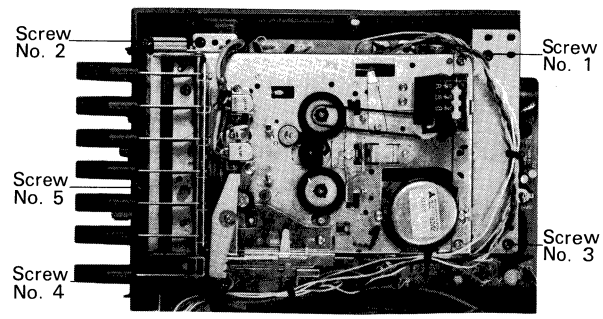


Fig. 5

ALIGNMENT INSTRUCTIONS (RADIO)-1

AF GAIN ALIGNMENT

Notes:

Audio Generator ..... 1kHz into L & R AUX inputs (30mV)
Attenuator ..... Connect Audio Generator (To AUX jack)
Function Selector ..... "AUX"
Volume Control ..... Maximum

STEP	ALIGNMENT	INDICATOR	ADJUST	REMARKS
1	AF gain balance alignment	VTVM of scope to left and right speaker jacks.	VR701	Make sure two VTVMs are balanced so that right channel outputs equals left.

Frequency & Distance on Dial Scale

To accurately align to the proper frequencies on the dial scale, refer to Table at right and mark the edge of the dial scale accordingly, using the "Start Point" mark on the dial scale as a reference point.

Band	Frequency	Distance from "Start Point
LW	145kHz 285kHz	12.2mm 162.9mm
MW	550kHz 1500kHz	17.2mm 162 mm
SW	5.9MHz 18.0MHz	6.8mm 169.7mm
FM	90MHz 106MHz	23 mm 153.3mm

Note:

1. Volume Control ..... Maximum (AM-IF & RF, FM-RF); Minimum (FM-IF)
2. Bass and Treble Control ..... Center
3. Balance Control ..... Center
4. Band Selector ..... LW, MW, SW, FM AUTO
5. Power Voltage Selector 110V
6. Power Switch ..... ON
7. Output of signal generator should be no higher than necessary to obtain output reading.
8. Make certain that speaker system is connected to the tuner when aligning.

STEP	SIGNAL GENERATOR or SWEEP GENERATOR		RADIO DIAL SETTING	INDICATOR (VTVM or SCOPE)	ADJUST	REMARKS
	CONNECTION	FREQUENCY				
AM-IF & ALIGNMENT						
1	Fashion loop of several turns of wire and radiate signal into loop of receiver.	455kHz 30% Mod. with 400Hz	Point of non-interference. on/about 600kHz.	Output meter across speaker jack (L). (Imp. 8Ω)	T201 (AM 1st IFT) T202 (AM 2nd IFT) T203 (AM 3rd IFT) T205 (AM 4th IFT)	Adjust for maximum output.
2 (LW)	Fashion loop of several turns of wire and radiate signal into loop of receiver.	455kHz 30% Mod. with 400Hz	145kHz (12.2mm)	Output meter across speaker jack (L). (Imp. 8Ω)	L209 (LW OSC Coil) L204 (LW ANT Coil)	Adjust for maximum output by sliding coil L204 along ferrite core.
3 (LW)	Fashion loop of several turns of wire and radiate signal into loop of receiver.	455kHz 30% Mod. with 400Hz	285kHz (162.9mm)	Output meter across speaker jack (L).. (Imp. 8Ω)	CT204 (LW OSC Trimmer) CT202 (LW ANT Trimmer)	Adjust for maximum output. Repeat Steps (2) and (3).
4 (MW)	Fashion loop of several turns of wire and radiate signal into loop of receiver.	455kHz 30% Mod. with 400Hz	550kHz (17.2mm)	Output meter across speaker jack (L). (Imp. 8Ω)	L206 (MW OSC Coil) L202 (MW ANT Coil)	Adjust for maximum output by sliding coil L202 along ferrite core.
5 (MW)	Fashion loop of several turns of wire and radiate signal into loop of receiver.	455kHz 30% Mod. with 400Hz	1500kHz (16.2mm)	Output meter across speaker jack (L). (Imp. 8Ω)	CT203 (MW OSC Trimmer) CT201 (MW ANT Trimmer)	Adjust for maximum output. Repeat steps (4) and (5).
6 (SW)	Fashion loop of several turns of wire and radiate signal into loop of receiver.	455kHz 30% Mod. with 400Hz	5.9MHz (6.8mm)	Output meter across speaker jack (L). (Imp. 8Ω)	L209 (SW OSC Coil) L204 (SW ANT Coil)	Adjust for maximum output by sliding coil L204 along ferrite core.
7 (SW)	Fashion loop of several turns of wire and radiate signal into loop of receiver.	455kHz 30% Mod. with 400Hz	18MHz (169.7mm)	Output meter across speaker jack (L). (Imp. 8Ω)	CT204 (SW OSC Trimmer) CT202 (SW ANT Trimmer)	Adjust for maximum output. Repeat steps (6) and (7).

ALIGNMENT INSTRUCTIONS (RADIO)-2

AM IFT
T201, 202 } 455kHz
T203, 205 } 470kHz (UK)

LW (For SG-1070L)
L209 (OSC Coil) }
L204 (ANT Coil) } 145kHz
CT204 (OSC Trimmer) }
CT202 (ANT Trimmer) } 285kHz

MW
L206 (OSC Coil) }
L202 (ANT Coil) } 550kHz
CT203 (OSC Trimmer) }
CT201 (ANT Trimmer) } 1500kHz

SW (For SG-1070A)
L209 (OSC Coil) }
L204 (ANT Coil) } 5.9MHz
CT204 (OSC Trimmer) }
CT202 (ANT Trimmer) } 18 MHz

FM IFT
T101 (FM 1st IFT) }
T204-1 (FM Disc. IFT) } 10.7MHz
T204-2 (FM Disc. IFT) }

FM-RF
L104 (OSC Coil) }
L101 (ANT Coil) } 90 MHz
L102 (DET Coil) }
CT103 (OSC Trimmer) }
CT101 (ANT Trimmer) } 106MHz
CT102 (DET Trimmer) }

FM STEREO
T301 (MPX Coil)
T302 (MPX Coil)
VR301 (Separation Control)
VR302 (Stereo Eye Level Ajust)

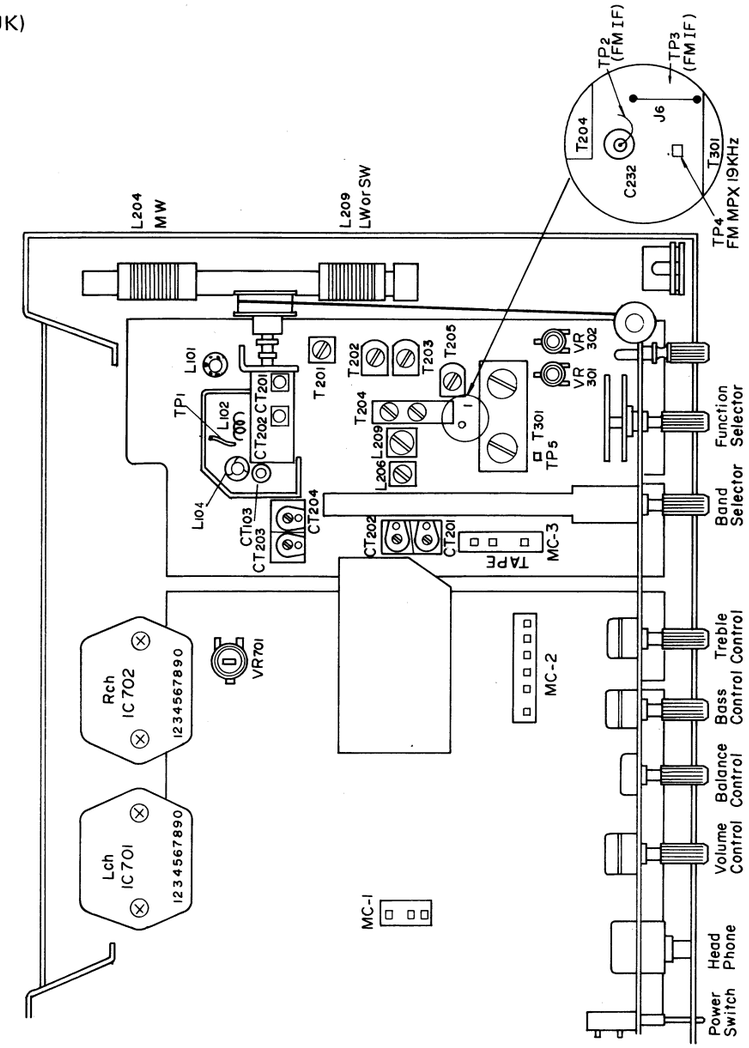


Fig. 6 ALIGNMENT POINTS

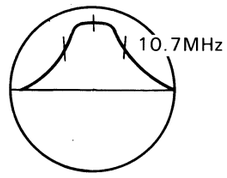


Fig. 7-a

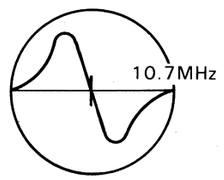


Fig. 7-b

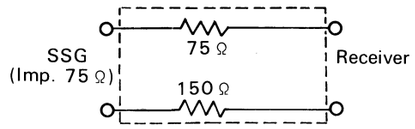


Fig. 8 DUMMY ANTENNA

ALIGNMENT INSTRUCTIONS (RADIO)-3

FM-IF & DETECTOR ALIGNMENT						
1	High side thru. 0.001 mfd to point TP1. Common to chassis.	10.7 MHz (400 kHz (SWP.)	Point of non-interference (on/ about 98 MHz)	Connect vert. amp. of scope to point TP2. Common to chassis.	T101 (FM 1st I.F.T.) T204, Core 1 (FM Disc. I.F.T.)	Adjust for maximum amplitude and symmetrical curve (Refer to Fig. 7-a)
2	High side thru. 0.001 mfd to point TP1. Common to chassis.	10.7 MHz (400 kHz SWP.)	Point of non-interference (on/ about 98 MHz)	Connect vert. amp. of scope to point TP3. Common to chassis.	T204, Core 2 (FM Disc. I.F.T.)	Adjust for maximum amplitude and proper linearity between ±100 kHz markers. (Refer to Fig. 7-b)
*** Before aligning step 1, turn the core-2 of T204 fully counterclockwise.**						
FM-RF ALIGNMENT						
1	Connect to EXT. FM antenna terminal through Dummy antenna. Common to chassis. (Refer to Fig. 8)	90 MHz 30% Mod. with 400 Hz	90 MHz (23mm)	Output meter across speaker jack (L). (Imp. 8Ω)	L104 (FM OSC Coil) L101 (FM ANT Coil) L102 (FM DET Coil)	Adjust for maximum output.
2	Connect to EXT. FM antenna terminal through Dummy antenna. Common to chassis. (Refer to Fig.8)	106 MHz 30% Mod. with 400 Hz	106 MHz (153.3mm)	Output meter across speaker jack (L). (Imp.8Ω)	CT103 (FM OSC Trimmer) CT101 (FM ANT Trimmer) CT102 (FM DET Trimmer)	Adjust for maximum output. Repeat steps (1) and (2).
***As three output readings will be present, adjustments must be made at center frequency.** *** To correct drift at the FM dial scale (87.5 or 108MHz), adjust coil L104 and trimmer CT103 with each other.**						

■ FM STEREO ALIGNMENT

Notes:
1. Stereo Modulator: Connect Stereo Modulator to EXT. Mod. terminal of signal generator
2. Signal Generator : Modulation Rate of 19 kHz Pilot Signal 10%
   Output Level . . . . . 30 dB
   Frequency . . . . . Approx. 98 MHz
3. Tuner : Volume Control . . . . . Audible level of speaker sound
   Tone Control . . . . . Low
   Band Selector . . . . . FM
   Balance Control . . . . . Center

19 kHz AMP. ALIGNMENT

EQUIPMENT CONNECTION		ADJUST	REMARKS
SIGNAL GENERATOR	OSCILLOSCOPE		
Connect to EXT. FM antenna terminal through dummy antenna. (Refer to Fig. 8)	Connect vert. Amp. of scope to point TP4. Common to chassis.	T301 (MPX Coil)	Adjust for maximum oscilloscope pattern of 19 kHz.

SEPARATION ALIGNMENT

Notes:
1. Signal Generator — Modulation Rate of 19 kHz Pilot Signal . . . . . 10%; Modulation Rate of Right and Left Signal . . . . . 27%; Output Level . . . . . 60 dB; 3. Tone Control . . . . . Low
2. Tuner (Balance Control): Adjust balance control so that output level from both channels becomes equal.

EQUIPMENT CONNECTION			ADJUST	REMARKS
SIGNAL GENERATOR	VTVM	OSCILLOSCOPE		
Connect to EXT. FM antenna terminal through dummy antenna. (Refer to Fig. 8)	Connect across speaker jack. (Left side) (Imp. 8Ω)	Connect vertical amp. input of scope to terminals of VTVM.	T302 (MPX Coil) VR301 (Separation Control)	Adjust T301 and VR301 for minimum indication on VTVM from the left side output when the right side of stereo modulator is modulated. Adjust T301 and VR301 in the same way for the right side. Adjust for best balance between "L to R" and "R to L" separation.
*** Before separation alignment, disconnect lead between TP4 and Oscilloscope.**				
	STEREO EYE LEVEL CHECK AND ALIGNMENT			
Connect to EXT. FM antenna terminal through dummy antenna. (Refer to Fig. 8)	Connect across speaker jack. (Left side) (Imp. 8Ω)	Connect to terminals of VTVM	VR302 (Stereo Eye Level Adjust)	Stereo eye should light up when about 23 dB is applied from signal generator. If not, adjust VR302 to light up.

ALIGNMENT INSTRUCTIONS (TAPE DECK)

■ ALIGNMENT POINT

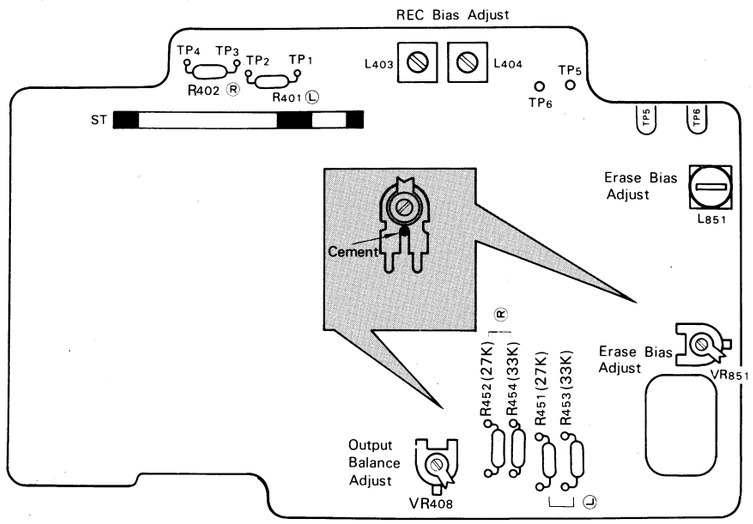


Fig. 9

■ RECORD/PLAYBACK HEAD AZIMUTH ADJUSTMENT

Play back a Standard Alignment Tape and turn head adjustment screw for maximum loudness.

※ Test Tape VTT-625 (6.3kHz) or VTT-671

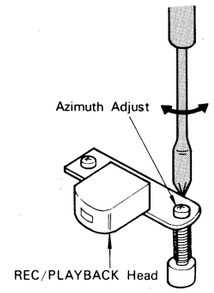


Fig. 10

■ BIAS VOLTAGE ALIGNMENT

STEP	CIRCUIT	VTVM CONNECTION	ADJUSTMENT	REMARKS
1	Output Balance	Speaker Terminals	VR408 (Output Balance Adjust)	Play back standard tape VTT671 and adjust VR408 by using 1 kHz so that right side output equals left.
2	Erase Bias	TP5, TP6	L851 (Erase Bias Adjust) VR851 (Erase Bias Adjust)	Adjust L851 for maximum indication of VTVM. Adjust VR851 for 9.0±0.2V reading on VTVM.
3	Record Bias	TP1, TP2, TP3, TP4	L403 (L) L404 (R) (Record Bias Adjust)	Adjust L403 (L404) for 9.9 ±0.2mV reading on VTVMs. The core of L403 (L404) should be turned to lower.
4	Erase Bias Record Bias	TP5, 6 TP1, 2, 3, 4	L851, VR851 L403, L404	Repeat steps (2) and (3) and make sure that each outputs are in compliance with the standards.

*** Connect TP2, TP4 and TP6 to ground (earth) on VTVM.**

■ AGC ALIGNMENT

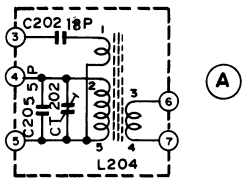
Notes:
1. Function Selector . . . . . TAPE
2. Bass and Treble . . . . . Center
3. Balance Control . . . . . Center
4. REC and Play Switch . . . . . ON
5. Function . . . . . TAPE
6. RC Oscillator and Attenuator . . . . . Connect to Playback Terminal (1 kHz 200mV)
7. VTVM . . . . . Connect to TP1 and TP2 (TP3 and TP4)
8. Erase Head . . . . . Short
9. The voltage difference between TP1 — TP2 and TP3 — TP4 should be less than 2 dB.

STEP	CIRCUIT	VTVM CONNECTION	ADJUSTMENT	REMARKS
1	Left	TP1, TP2	R451 (27k) R453 (33k)	If left side voltage less than right, cut R451 or R453 and left side voltage may increase.
2	Right	TP3, TP4	R452 (27k) R454 (33k)	Check as to right side voltage by using the same way.

SCHEMATIC DIAGRAM MOD

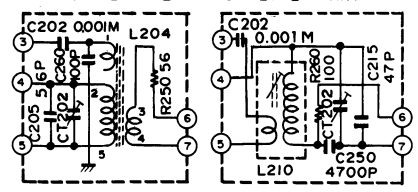
SG1070A

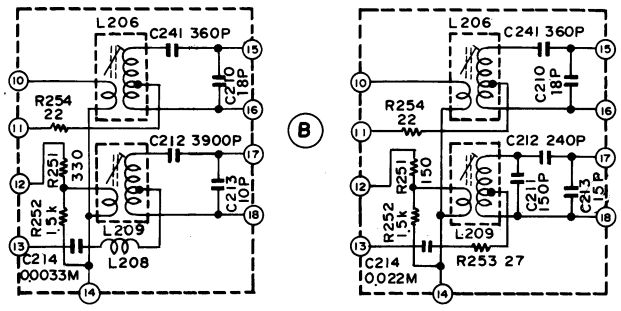
SW FERRITE ANT



SG1070L

LW FERRITE ANT OR LW EXT ANT

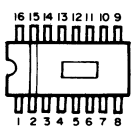




	R219	R220	R261	R509,510	R513,514	R507,508	R511,512	C109,122,123 124,717,718
SG-1070L	68K	82K	0	82K	0	270	4.7K	
SG-1070A	3.3K	47K	1K	10K	10K	120	12K	REMOVED

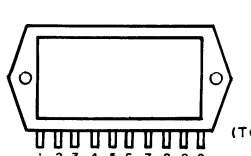
FM MPX
IC301
AN271-B

IC201, 301



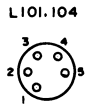
(TOP VIEW)

IC701, 702

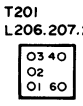


(TOP VIEW)

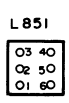
L101, 104



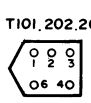
T201
L206, 207, 209



L851

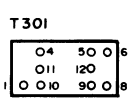


T101, 202, 203, 205

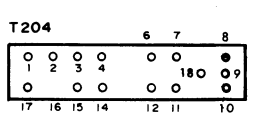


(BOTTOM VIEW)

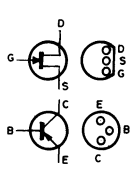
T301



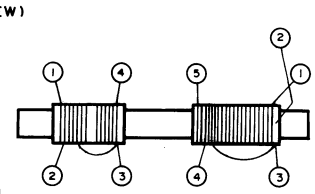
T204



(BOTTOM VIEW)



(BOTTOM VIEW)



FM RF AMP
TR101: 2SK19-GR

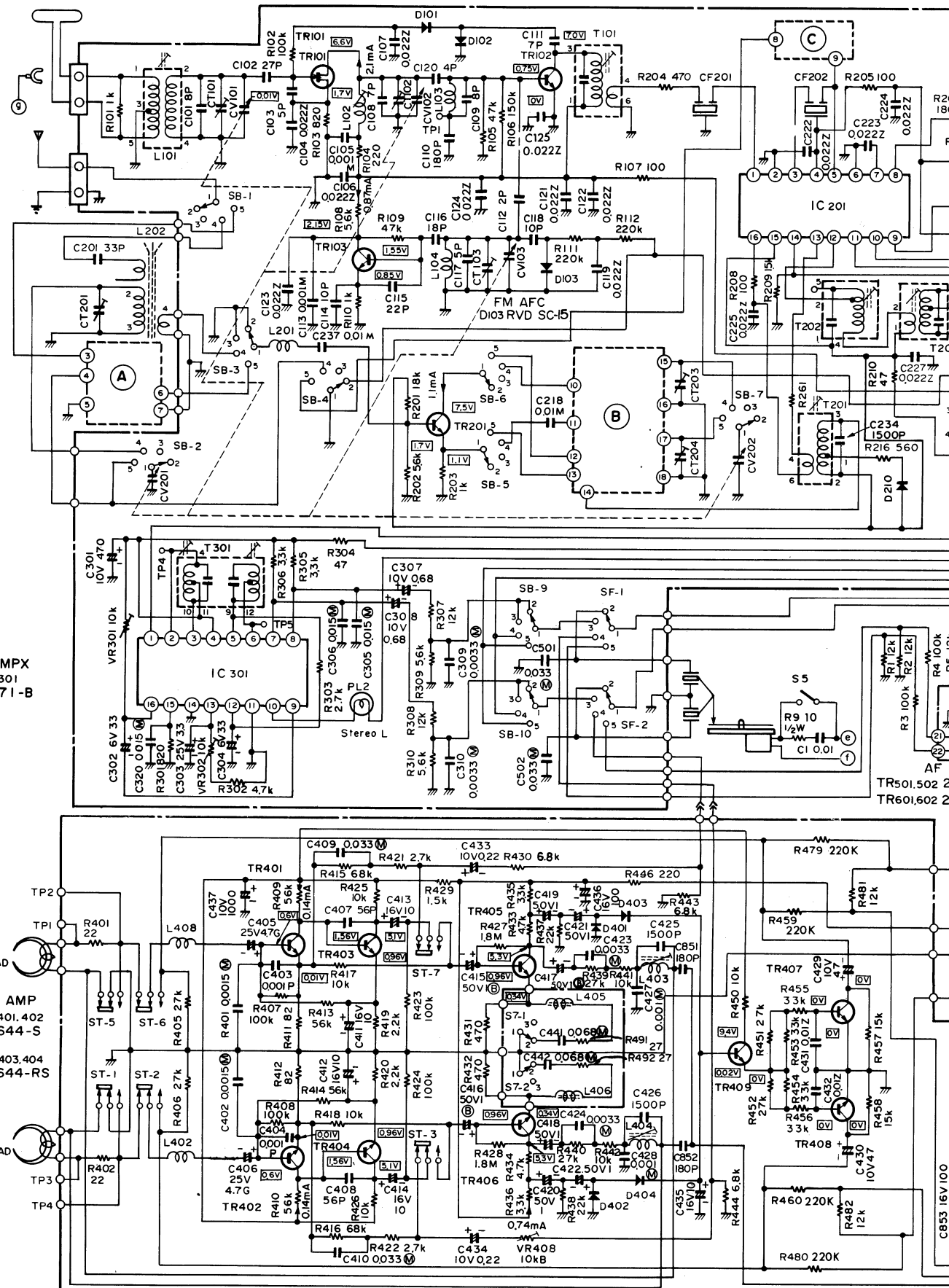
FM OSC
TR103: 2SC922-KL

AM CONV
TR201: 2SC1359-A

FM MIX
TR102: 2SC922-KL

FM AGC
D101,102: 0A90

FM AM IF AM
IC201: AN217-



	REC AMP TR405406:2SC644-RS	RECT D401,402,403,404 SVDVD1121	TR409:2SC828-RS	REC A TR407,408:
R	251 252 254 222 251 252 254 253 260 101 401 402 301 405 406 302 306 305 303 415 110 421 202 307 407 409 413 417 425 423 429 309 408 411 410 414 416 419 424 308 412 304 418 420 426 422 310 102 103 104 108 109 201 203 105 106 437 430 439 441 440 107 112 204 111 442 446 443 208 209 455 481 205 210 451 261 456 216 450 452 479 460 1 2 3 4 444 453 459 480 457 454 9 482 458			
C	202 205 214 219 241 242 210 209 202 205 260 214 202 241 210 211 212 213 250 215 201 301 302 101 303 304 437 401 405 402 406 102 103 113 105 110 107 120 110 123 104 237 106 305 108 116 309 114 115 308 310 403 408 306 411 307 414 124 404 410 409 412 413 125 109 112 121 111 423 119 117 118 122 218 422 415 420 442 419 436 416 434 417 441 425 427 851 428 426 852 435			

DIAGRAM MODEL SG-1070A/SG-1070L

FM AGC D101,102: 0A90

FM AM IF AMP IC201: AN217-BB

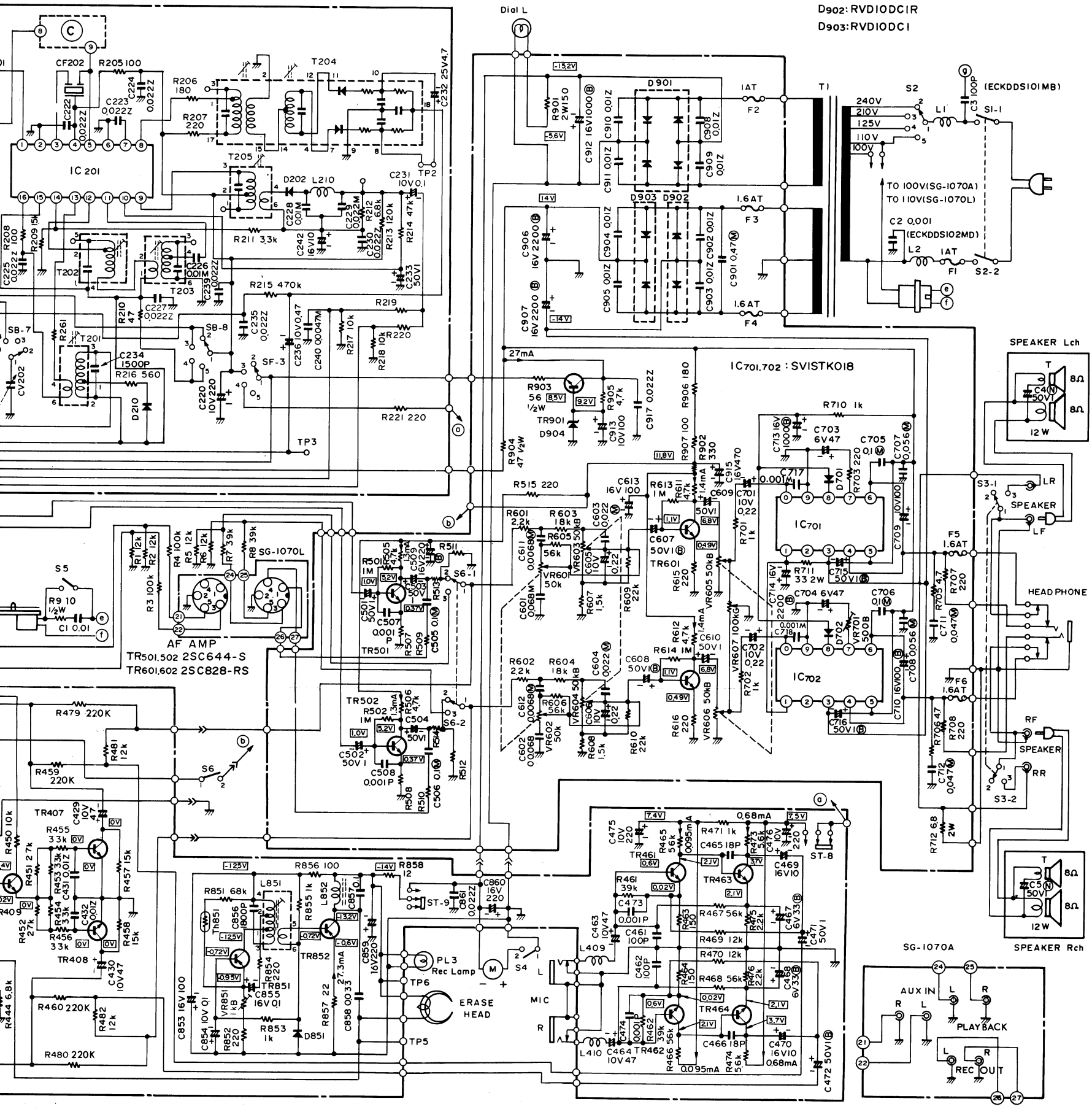
DAGC D201: 0A90

AM DET D202: 0A90

RIPPLE FILTER TR901: 2SC1383-PQ

AOC D904: SVD02Z9.5A

RECT D901: SVDSIRBIO
D902: RVDIODC1R
D903: RVDIODC1



	S(V)	G(V)	D(V)	Ip(mA)
TR101	1.7	-0.01	6.6	2.1

	B(V)	C(V)	E(V)	Ic(mA)
TR102	0.75	7.0	0	2.0
TR103	1.55	2.15	0.85	0.87
TR201	1.7	7.5	1.1	1.1
TR501,502	1.0	5.2	0.37	1.3
TR601,602	1.1	6.8	0.49	1.04
TR401,402	0.6	1.56	0.01	0.14
TR403,404	1.56	5.1	0.96	0.44
TR405,406	0.96	5.3	0.34	0.74
TR407,408	0	0	0	0
TR409	0.02	9.4	0	0.01
TR461,462	0.6	2.1	0.02	0.095
TR463,464	2.1	3.7	2.1	0.68
TR851	-0.72	-12.5	-0.95	1.5
TR852	-0.72	-13.2	-0.6	27.3
TR901	9.2	12.5	8.5	27.0

IC201		
PIN NO.	FM(V)	AM(V)
1	0.8	0.8
2	0	0
3	2.75	2.65
4	6.6	6.3
5	1.05	1.05
6	0	0
7	1.05	1.05
8	7.2	7.2
9	7.6	7.6
10	1.05	1.45
11	0.79	0.78
12	0.77	7.5
13	0.52	0.72
14	0.76	1.45
15	0.77	7.5
16	0.52	0.72

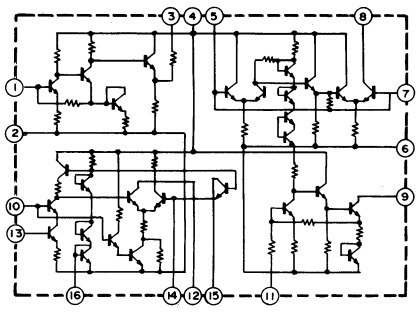
IC301	
PIN NO.	(V)
1	2.2
2	7.5
3	7.5
4	7.5
5	2.25
6	2.25
7	5.0
8	5.1
9	1.5
10	14(0.85)
11	0
12	0.93(1.15)
13	0(0.84)
14	0
15	0.88
16	5.4

IC701	
PIN NO.	(V)
1	-13.8
2	0
3	-14.0
4	0
5	14.0
6	7.2
7	0.13
8	7.6
9	0
0	0.13

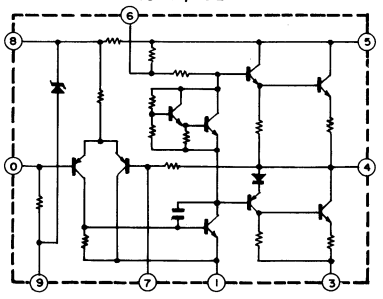
IC702	
PIN NO.	(V)
1	-13.8
2	0
3	-14.0
4	0
5	14.0
6	7.2
7	0.13
8	7.6
9	0
0	0.13

IC EQUIVALENT CIRCUIT

IC201



IC701, 702



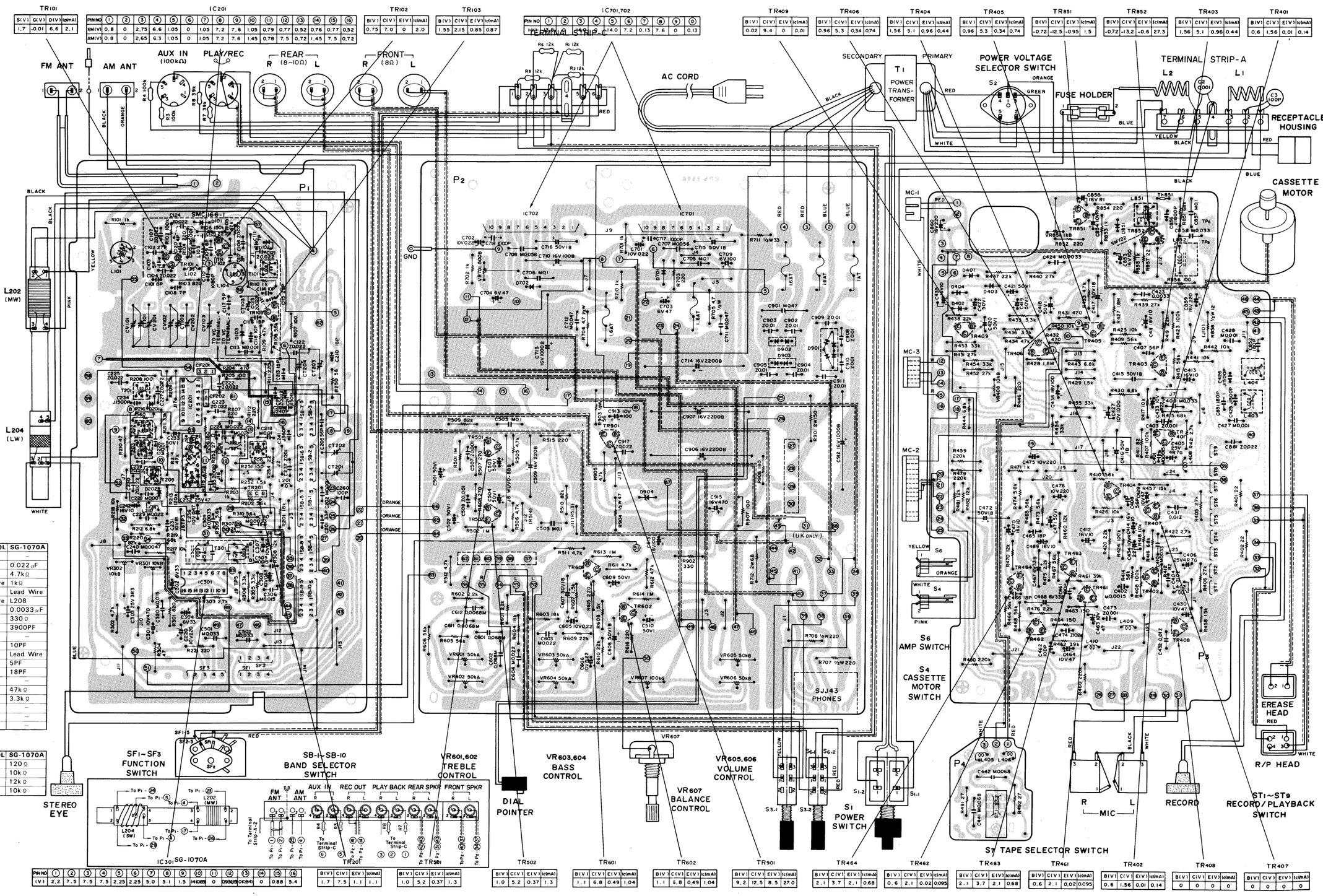
REC AGC
TR409: 2SC828-RS TR407,408: 2SC644-RS

BIAS OSC AMP
TR851: 2SB175-B TR852: 2SB324-KVL D851: SVDVD1121

MIC AMP
TR461,462,463,464 2SC644-RS

| | | |

WIRING DIAGRAM MODEL SG-1070A/SG-1070L



REMARKS:

(RF & IF Circuit)

REF NO.	SG-1070L	SG-1070A
C109	8P	–
C219	–	0.022 μF
R222	–	4.7kΩ
R261	Lead Wire	1kΩ
R253	27Ω	Lead Wire
L208	Lead Wire	L208
C214	0.022 μF	0.0033 μF
R251	150Ω	330Ω
C212	240PF	3900PF
C211	150PF	–
C213	18PF	10PF
R250	56Ω	Lead Wire
C205	56PF	5PF
C202	0.001 μF	18PF
C260	100PF	–
R220	82kΩ	47kΩ
R219	68kΩ	3.3kΩ
C122	0.022	–
C123	0.022	–
C124	0.022	–

(Main Circuit)

REF NO.	SG-1070L	SG-1070A
R507,508	270Ω	120Ω
R509,510	82kΩ	10kΩ
R511,512	4.7kΩ	12kΩ
R513,514	–	10kΩ

TR101	S(V)	G(V)	D(V)	I(mA)
	1.7	-0.01	6.6	2.1

IC201 PIN NO	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬	⑭	⑮	⑯
FM(V)	0.8	0	2.75	6.6	1.05	0	1.05	7.2	7.6	1.05	0.79	0.77	0.52	0.76	0.77	0.52
AM(V)	0.8	0	2.65	6.3	1.05	0	1.05	7.2	7.6	1.45	0.78	7.5	0.72	1.45	7.5	0.72

TR102	B(V)	C(V)	E(V)	I(mA)
	0.75	7.0	0	2.0

TR103	B(V)	C(V)	E(V)	I(mA)
	1.55	2.15	0.85	0.87

IC701,702 PIN NO	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩
(V)	14.0	7.2	0.13	7.6	0	0.13				

TR409	B(V)	C(V)	E(V)	I(mA)
	0.02	9.4	0	0.01

TR406	B(V)	C(V)	E(V)	I(mA)
	0.96	5.3	0.34	0.74

TR404	B(V)	C(V)	E(V)	I(mA)
	1.56	5.1	0.96	0.44

TR405	B(V)	C(V)	E(V)	I(mA)
	0.96	5.3	0.34	0.74

TR851	B(V)	C(V)	E(V)	I(mA)
	-0.72	-12.5	-0.95	1.5

TR852	B(V)	C(V)	E(V)	I(mA)
	-0.72	-13.2	-0.6	27.3

TR403	B(V)	C(V)	E(V)	I(mA)
	1.56	5.1	0.96	0.44

TR401	B(V)	C(V)	E(V)	I(mA)
	0.6	1.56	0.01	0.14

PIN NO	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬	⑭	⑮	⑯
(V)	2.2	7.5	7.5	7.5	2.25	2.25	5.0	5.1	1.5	14.0	0	2.93	5.0	2.84	0	0.88	5.4

TR201	B(V)	C(V)	E(V)	I(mA)
	1.7	7.5	1.1	1.1

TR501	B(V)	C(V)	E(V)	I(mA)
	1.0	5.2	0.37	1.3

TR502	B(V)	C(V)	E(V)	I(mA)
	1.0	5.2	0.37	1.3

TR601	B(V)	C(V)	E(V)	I(mA)
	1.1	6.8	0.49	1.04

TR602	B(V)	C(V)	E(V)	I(mA)
	1.1	6.8	0.49	1.04

TR901	B(V)	C(V)	E(V)	I(mA)
	9.2	12.5	8.5	27.0

TR464	B(V)	C(V)	E(V)	I(mA)
	2.1	3.7	2.1	0.68

TR462	B(V)	C(V)	E(V)	I(mA)
	0.6	2.1	0.02	0.095

TR463	B(V)	C(V)	E(V)	I(mA)
	2.1	3.7	2.1	0.68

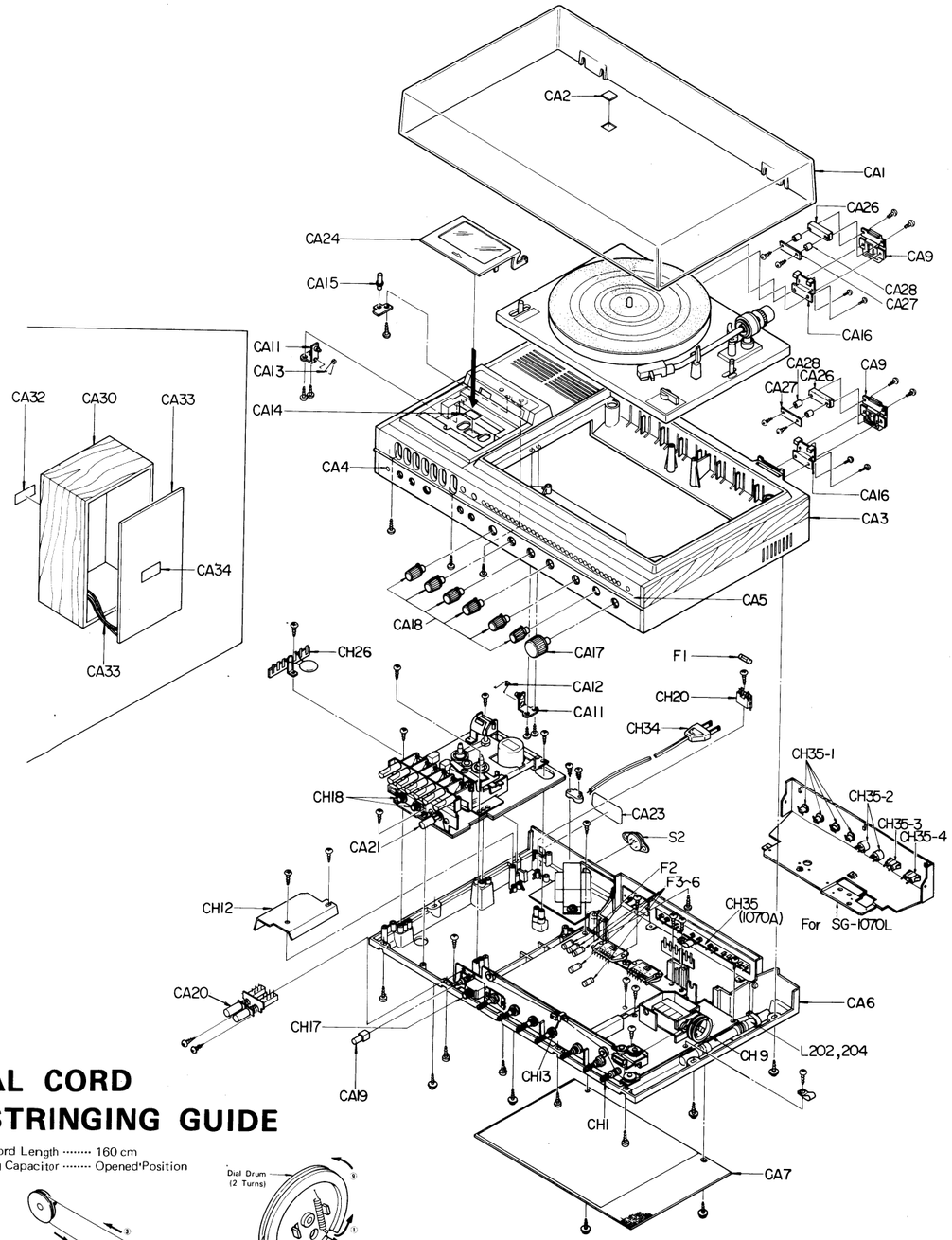
TR461	B(V)	C(V)	E(V)	I(mA)
	0.6	2.1	0.02	0.095

TR402	B(V)	C(V)	E(V)	I(mA)
	0.6	1.56	0.01	0.14

TR408	B(V)	C(V)	E(V)	I(mA)
	0	0	0	0

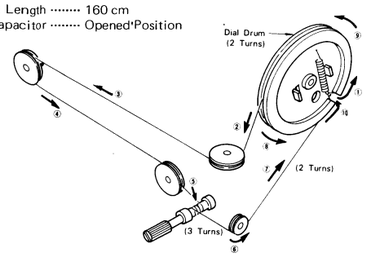
TR407	B(V)	C(V)	E(V)	I(mA)
	0	0	0	0

LOCATION OF CABINET PARTS

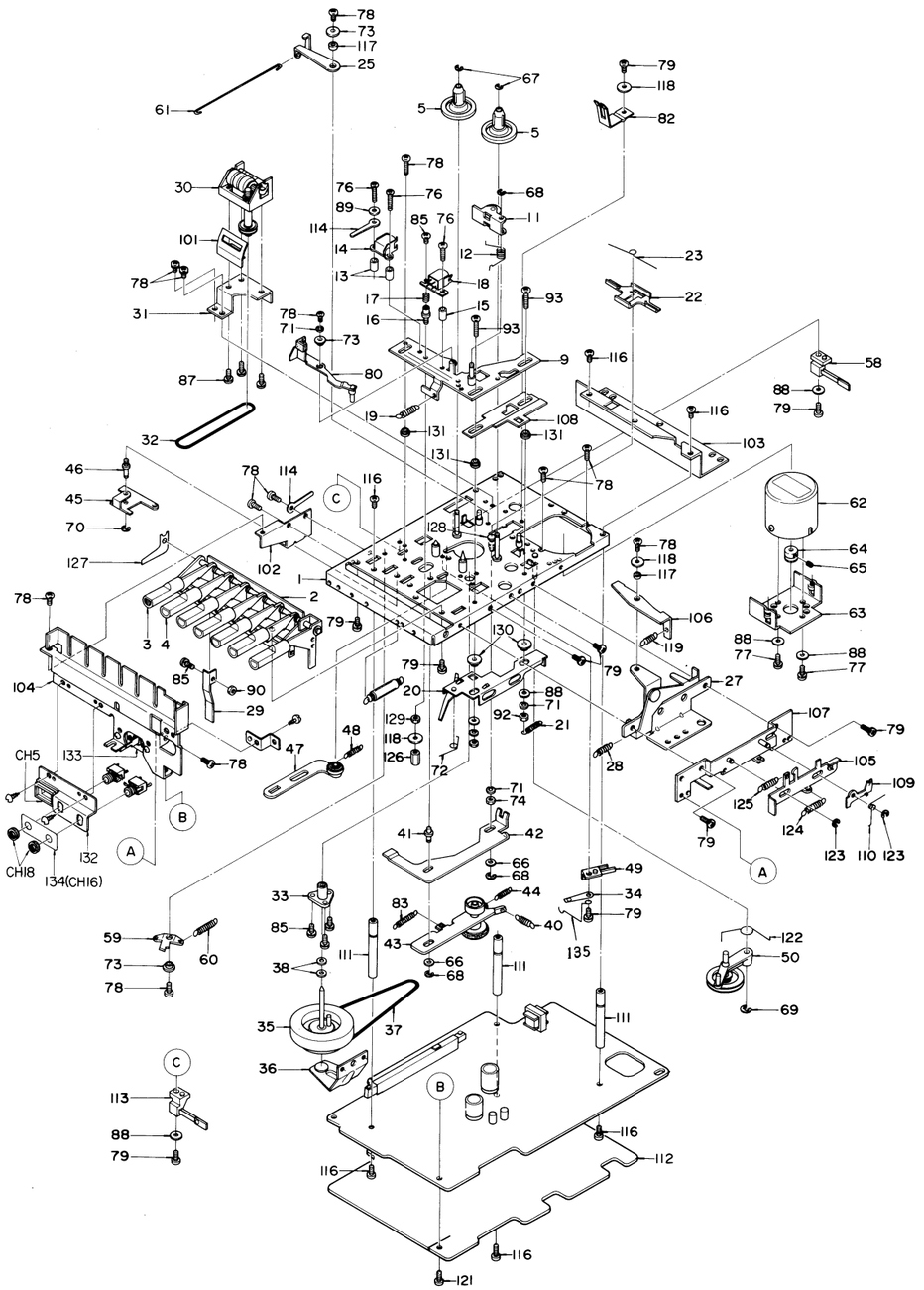


DIAL CORD STRINGING GUIDE

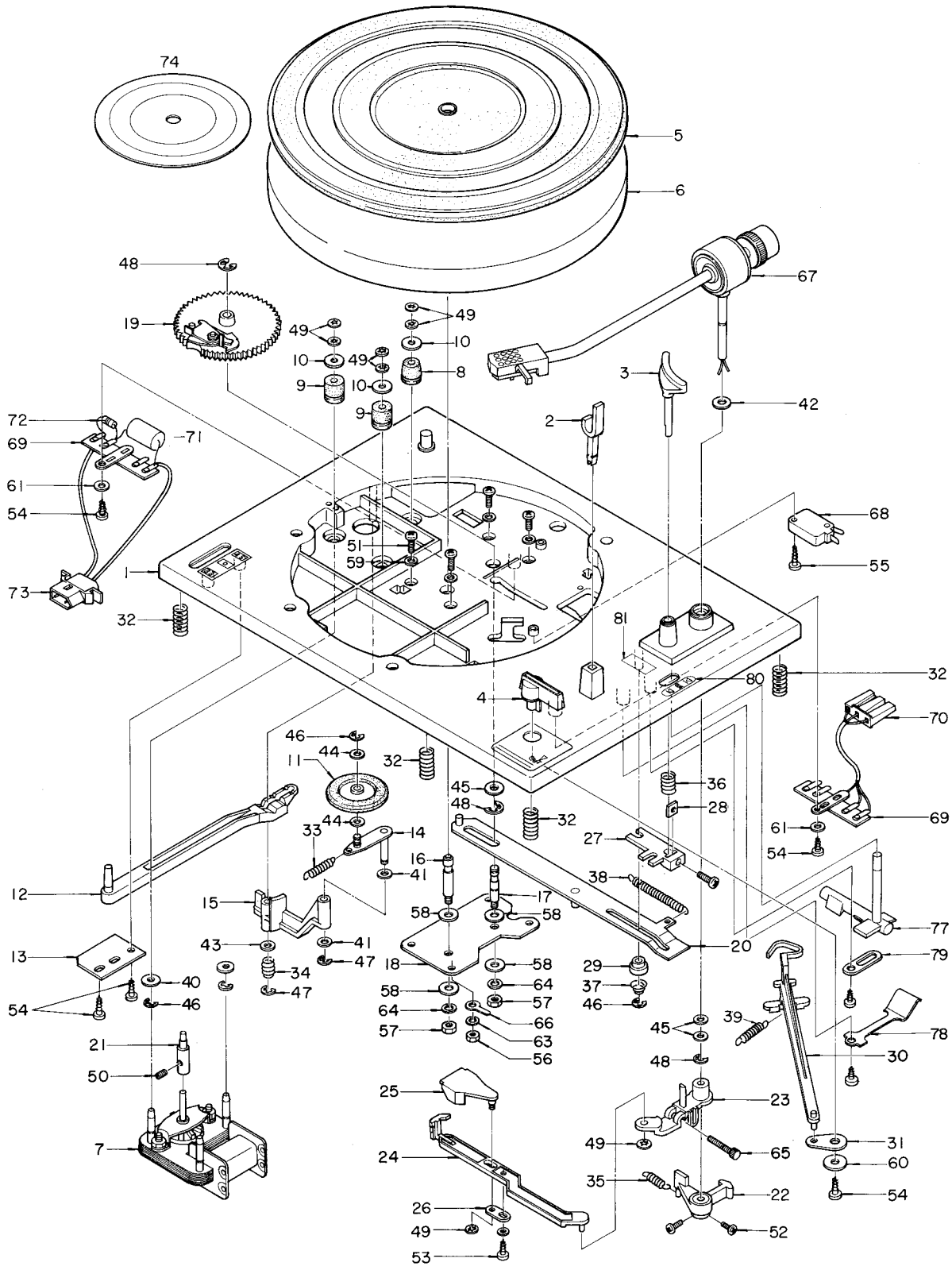
* Dial Cord Length ····· 160 cm
* Tuning Capacitor ····· Opened Position



EXPLODED VIEW OF CASSETTE TAPE DECK



EXPLODED VIEW OF RECORD PLAYER



REPLACEMENT PARTS LIST

Ref. No.	Part No.	Description	Per set (pcs.)	Remarks
TRANSISTORS AND INTEGRATED CIRCUITS				
TR101	2SK19-GR	FM RF Amplifier (FET)	1	
TR102,103	2SC922-K,L	FM Mixer, FM Oscillator	2	
TR201	2SC1359-A	AM Converter	1	
TR401,402 501,502	2SC644-S	Equalizer Amp. 1st AF Amp.	4	
TR403–408 461–464	2SC644-R,S	Equalizer Amp., REC Amp.,MIC Amp	10	
TR409,601 602	2SC828-R,S	REC AGC, 2nd AF Amp.	3	
TR851	2SB175-B	Bias Oscillator	1	
TR852	2SB324-K,V,L	Oscillator Amp.	1	
TR901	2SC1383-P,Q	Ripple Filter	1	
IC201	AN217-BB	FM IF Amp. and AM AF Amp.	1	
IC301	AN271-B	FM MPX	1	
IC701,702	SVISTK018	Power Output	2	
DIODES				
D101,102 201,202	OA90	FM AGC, AM AGC, AM DET	4	
D103	RVDSC15	AFC	1	
D401–404 851,701,702	SVDV1121	Rectifier, AOC	7	
D901	SVDS1RB10	Rectifier	1	
D902	RVD10DC1R	Rectifier	1	
D903	RVD10DC1	Rectifier	1	
D904	SVD02Z9.5A	AOC	1	
THERMISTOR				
THTH851	RRT103	Temperature Compensator	1	
LAMP AND FUSE				
PL2,3	XAMR34X300-1	Stereo Eye, REC Eye	2	
F1,F2	XBAS2A1004	Fuse, 1A	2	
F3~6	XBAS2A1602	Fuse, 1.6A	4	
COILS AND TRANSFORMERS				
L101	SLA4P8	FM Antenna Coil	1	
L104	SL04P6	FM Oscillator Coil	1	
L102	SLD4Y10	FM Detector Coil	1	
L103,402, 408–410	SLQY11G-2	RFC	5	
L201	ELQ5A9-R	RFC	1	
L202,204	SLF6G14	MW and LW Antenna Coil	1	SG-1070L
L202,204	SLF5G20	MW and SW Antenna Coil	1	SG-1070A
L206	RLO2B83M	AM Oscillator Coil	1	
L209	SLO1C8	LW Oscillator Coil	1	SG-1070L
L209	SLO3C2	SW Oscillator Coil	1	SG-1070A
L403,404	RLQC542-T	Bias Trap Coil	2	
L851	SLO9Z10-T	Bias Oscillator Coil	1	
L852	SLT6E2-D	Choke Transformer Coil	1	
L210,405,406	SLQV222-2Y	Choke Coil	3	
L1,2	SLQY35S-2D	RFC	2	
T101	RLI4M101	FM 1st IFT	1	
T204	EULBFD108R	FM Disc. IFT	1	
T201	SLI2B108	AM 1st IFT	1	
T202	RLI2M201	AM 2nd IFT	1	
T203	RLI2M202	AM 3rd IFT	1	
T205	RLI2M401	AM 4th IFT	1	
T301	SLM5Z2-K	FM MPX Coil	1	
T1	SLT5M26-D	Power Transformer	1	
CF201,202	RVFCF10M12C	FM Ceramic Filter	2	
L208	RLQY25S5	RFC	1	SG-1070A
RESISTORS (Main Circuit)				
R907	ERD14TJ101	100Ω ¼Watt ±5% Carbon	1	
R615,616,515 703	ERD14TJ221	220Ω ¼Watt ±5% Carbon	4	
R507,508	ERD14TJ271	270Ω ¼Watt ±5% Carbon	2	SG-1070L
	ERD14TJ121	120Ω ¼Watt ±5% Carbon	2	SG-1070A
R902	ERD14TJ331	330Ω ¼Watt ±5% Carbon	2	

Ref. No.	Part No.	Description	Per set (pcs.)	Remarks
R701,702,710	ERD14TJ102	1kΩ ¼Watt ±5% Carbon	2	
R607,608	ERD14TJ152	1.5kΩ ¼Watt ±5% Carbon	2	
R601,602	ERD14TJ222	2.2kΩ ¼Watt ±5% Carbon	2	
R505,506,511 512,611,612 905	ERD14TJ472	4.7kΩ ¼Watt ±5% Carbon	7	
R906	ERD14TJ181	180Ω ¼Watt ±5% Carbon	1	SG-1070A
R603,604	ERD14TJ183	18kΩ ¼Watt ±5% Carbon	2	
R609,610	ERD14TJ223	22kΩ ¼Watt ±5% Carbon	2	
R605,606	ERD14TJ563	56kΩ ¼Watt ±5% Carbon	2	
R511,512	ERD14TJ123	12kΩ ¼Watt ±5% Carbon	2	SG-1070A
R513,514	ERD14TJ103	10kΩ ¼Watt ±5% Carbon	2	SG-1070A
R509,510	ERD14TJ823	82kΩ ¼Watt ±5% Carbon	2	SG-1070L
R509,510	ERD14TJ103	10kΩ ¼Watt ±5% Carbon	2	SG-1070A
R613,614 501,502	ERD14TJ105	1.5MΩ ¼Watt ±5% Carbon	4	
R904	ERD12FJ470	47Ω ½Watt ±5% Carbon	1	
R903	ERD12FJ560	56Ω ½Watt ±5% Carbon	1	
R707,708	ERD12TJ221	220Ω ½Watt ±5% Carbon	2	
R705,706	ERD12TJ4R7	4.7Ω ½Watt ±5% Carbon	2	
R711	ERD12FJ330	33Ω ½Watt ±5% Carbon	1	
R901	ERG2ANJ151	150Ω 2Watts ±10% Solid	1	
R712	ERX2ANJ6R8	6.8Ω 2Watts ±10% Metal Film	1	
(RF Circuit)				
R210,314	ERD14TJ470	47Ω ¼Watt ±5% Carbon	2	
R250	ERD14TJ560	56Ω ¼Watt ±5% Carbon	1	SG-1070L
R107,205,208	ERD14TJ101	100Ω ¼Watt ±5% Carbon	3	
R251	ERD14TJ151	150Ω ¼Watt ±5% Carbon	1	SG-1070L
R251	ERD14TJ331	330Ω ¼Watt ±5% Carbon	1	SG-1070A
R104,211,207	ERD14TJ221	220Ω ¼Watt ±5% Carbon	3	
R204	ERD14TJ471	470Ω ¼Watt 5% Carbon	1	
R206	ERD14TJ181	180Ω ¼Watt ±5% Carbon	1	
R103,301	ERD14TJ821	820Ω ¼Watt ±5% Carbon	2	
R101,110,203	ERD14TJ102	1kΩ ¼Watt ±5% Carbon	3	
R209,252	ERD14TJ152	1.5kΩ ¼Watt ±5% Carbon	2	
R211,305,306	ERD14TJ332	3.3kΩ ¼Watt ±5% Carbon	3	
R202,309,310 108	ERD14TJ562	5.6kΩ ¼Watt ±5% Carbon	4	
R303	ERD14TJ272	2.7kΩ ¼Watt ±5% Carbon	1	
R212	ERD14TJ682	6.8kΩ ¼Watt ±5% Carbon	1	
R217,218	ERD14TJ103	10kΩ ¼Watt ±5% Carbon	2	
R307,308	ERD14TJ123	12kΩ ¼Watt ±5% Carbon	2	
R201	ERD14TJ183	18kΩ ¼Watt ±5% Carbon	1	
R105,109,214	ERD14TJ473	47kΩ ¼Watt ±5% Carbon	3	
R219	ERD14TJ683	68kΩ ¼Watt ±5% Carbon	1	SG-1070L
R219	ERD14TJ332	3.3kΩ ¼Watt ±5% Carbon	1	SG-1070A
R220	ERD14TJ823	82kΩ ¼Watt ±5% Carbon	1	SG-1070L
R220	ERD14TJ473	47kΩ ¼Watt ±5% Carbon	1	SG-1070A
R102	ERD14TJ104	100kΩ ¼Watt ±5% Carbon	1	
R213	ERD14TJ124	120kΩ ¼Watt ±5% Carbon	1	
R106	ERD14TJ154	150kΩ ¼Watt ±5% Carbon	1	
R261	ERD14TJ102	1kΩ ¼Watt ±5% Carbon	1	SG-1070A
R111,112	ERD14TJ224	220kΩ ¼Watt ±5% Carbon	2	
R215	ERD14TJ474	470kΩ ¼Watt ±5% Carbon	1	
R216	ERD14TJ561	560Ω ¼Watt ±5% Carbon	1	
R254	ERD14TJ220	22Ω ¼Watt ±5% Carbon	1	
R253	ERD14TJ270	27Ω ¼Watt ±5% Carbon	1	SG-1070L
R302,222	ERD14TJ472	4.7kΩ ¼Watt ±5% Carbon	2	R222:SG-1070A
(Cassette Circuit)				
R401,402,857	ERD14TJ220	22Ω ¼Watt ±5% Carbon	3	
R411,412	ERD14TJ820	82Ω ¼Watt ±5% Carbon	2	
R856	ERD14TJ101	100Ω ¼Watt ±5% Carbon	1	
R463,464	ERD14TJ151	150Ω ¼Watt ±5% Carbon	2	
R446,852,854	ERD14TJ221	220Ω ¼Watt ±5% Carbon	3	
R431,432	ERD14TJ471	470Ω ¼Watt ±5% Carbon	2	
R471,853,855	ERD14TJ102	1kΩ ¼Watt ±5% Carbon	3	
R419,420,475 476	ERD14TJ222	2.2kΩ ¼Watt ±5% Carbon	4	
R421,422	ERD14TJ272	2.7kΩ ¼Watt ±5% Carbon	2	
R473,474	ERD14TJ562	5.6kΩ ¼Watt ±5% Carbon	2	
R443,444 430	ERD14TJ682	6.8kΩ ¼Watt ±5% Carbon	3	

REPLACEMENT PARTS LIST

Ref. No.	Part No.	Description	Per set (pcs.)	Remarks
R417,418,425 426,441,442 450	ERD14TJ103	10kΩ ¼Watt ±5% Carbon	7	
R457,458	ERD14TJ153	15kΩ ¼Watt ±5% Carbon	2	
R437,438	ERD14TJ223	22kΩ ¼Watt ±5% Carbon	2	
R405,406,439 440,451,452	ERD14TJ273	27kΩ ¼Watt ±5% Carbon	6	
R453 ~456	ERD14TJ333	33kΩ ¼Watt 5% Carbon	4	
R461,462	ERD14TJ393	39kΩ ¼Watt ±5% Carbon	2	
R409,410,413 414,465,466 467,468	ERD14TJ563	56kΩ ¼Watt ±5% Carbon	8	
R415,416,851	ERD14TJ683	68kΩ ¼Watt ±5% Carbon	3	
R423,424,407 408	ERD14TJ104	100kΩ ¼Watt ±5% Carbon	4	
R429	ERD14TJ152	1.5Ω ¼Watt ±5% Carbon	1	
R435,436	ERD14TJ332	3.3kΩ ¼Watt ±5% Carbon	2	
R433,434	ERD14TJ472	4.7kΩ ¼Watt ±5% Carbon	2	
R469,470,481 482	ERD14TJ123	12kΩ ¼Watt ±5% Carbon	4	
R858	ERD12FJ120	12Ω ½Watt ±5% Carbon	1	
R427,428	ERC12ZGK185	1.8MΩ ½Watt ±10% Carbon	2	
(Others)				
R491,492	ERD14VJ270	27Ω ¼Watt ±5% Carbon	2	
R1,2,5,6	ERD14TJ123	12kΩ ¼Watt ±5% Carbon	4	
R7,8	ERD14TJ393	39kΩ ¼Watt ±5% Carbon	2	
R3,4	ERD14TJ104	100kΩ ¼Watt ±5% Carbon	2	
CAPACITORS (Main Circuit)				
C718,717	ECKD1H102MD	0.001μF 50WV ±20% Ceramic	2	
C507,508 902–905	ECKD1H102PF	0.001μF 50WV +80 −20 % Ceramic	2	
C908–911	ECKD1H103ZFZ	0.01μF 50WV +80 −20 % Ceramic	8	
C917	ECKD1H223ZFZ	0.022μF 50WV +80 −20 % Ceramic	1	
C611,612	ECQM05682MZ	0.0068μF 50WV ±20% Polyester	2	
C603,604	ECQM05223MZ	0.022μF 50WV ±20% Polyester	2	
C711,712	ECQM05473MZ	0.047μF 50WV ±20% Polyester	2	
C707,708	ECQM05563MZ	0.056μF 50WV ±20% Polyester	2	
C601,602	ECQM05683MZ	0.068μF 50WV ±20% Polyester	2	
C505,506,705 706	ECQM05104MZ	0.1μF 50WV ±20% Polyester	4	
C901	ECQM05474MZ	0.47μF 50WV ±20% Polyester	1	
C605,606,701 702	ECAG10ER22	0.22μF 10WV Electrolytic	4	
C703,704	ECEA6V47L	47μF 6.3V Electrolytic	2	
C913	ECEA10V100L	100μF 10WV Electrolytic	1	
C613,709	ECEA16V100L	100μF 16WV Electrolytic	2	
C509	ECEB16V220L	220μF 16WV Electrolytic	1	
C915	ECEA16V470L	470μF 16WV Electrolytic	1	
C501–504,609 610	ECEA50V1L	1μF 50WV Electrolytic	6	
C713,912	ECEB16V1000L	1000μF 16WV Electrolytic	2	
C906,907,714	ECEB16V2200L	2200μF 22WV Electrolytic	3	
C607,608,715 716	ECEB50V1L	1μF 50WV Electrolytic	4	
C710	ECEB10V100L	100μF 16WV Electrolytic	1	
(RF Circuit)				
C112	ECCD1H020C	2pF 50WV ±0.25pF Ceramic	1	
C120	ECCD1H040C	4pF 50WV ±0.25pF Ceramic	1	
C103,117,205	ECCD1H050C	5pF 50WV ±0.25pF Ceramic	3	C205:SG-1070A
C108,111	ECCD1H070D	7pF 50WV ±0.5pF Ceramic	2	
C101,109	ECCD1H080D	8pF 50WV ±0.5pF Ceramic	2	C109:SG-1070L
C114,118,213	ECCD1H100F	10pF 50WV ±1pF Ceramic	3	C213:SG-1070A
C201	ECCD1H330K	330pF 50WV ±10% Ceramic	1	
C116,202,210	ECCD1H180K	18pF 50WV ±10% Ceramic	3	C202:SG-1070A
C213	ECCD1H150K	15pF 50WV 10% Ceramic	1	C213:SG-1070L
C115	ECCD1H220K	22pF 50WV ±10% Ceramic	2	
C102	ECCD1H270K	27pF 50WV ±10% Ceramic	1	

Ref. No.	Part No.	Description	Per set (pcs.)	Remarks
C205	ECCD1H560K	56pF 50WV ±10% Ceramic	1	SG-1070L
C260	ECCD1H101K	100pF 50WV ±10% Ceramic	1	SG-1070L
C105,113,202	ECCD1H102MD	0.001μF 50WV ±20% Ceramic	3	C202:SG-1070A
C218,226,228	ECCD1H103MD	0.01μF 50WV ±20% Ceramic	3	
C214,229	ECCD1H223MD	0.022μF 50WV ±20% Ceramic	2	C214:SG-1070L
C214	ECCD1H332MD	0.0033μF 50WV ±20% Ceramic	1	SG-1070A
C240	ECCD1H472MD	0.0047μF 50WV ±20% Ceramic	1	
C104,106,107 119,222–225 121–125,225 227,230,235 239	ECCD1H223ZFZ	0.022μF 50WV +80 −20 % Ceramic	17	C122~124: SG-1070L C219:SG-1070A
C237	ECCD1H103ZFZ	0.01μF 50WV +80 −20 % Ceramic	1	
C110	ECCD1H181K	180pF 50WV ±10% Ceramic	1	
C211	ECQS1151JZ	150pF 100WV ±5% Styrol	1	SG-1070L
C212	ECQS241JZ	240pF 100WV ±5% Styrol	1	SG-1070L
C212	ECQS392JZ	3900pF 100WV ±5% Styrol	1	SG-1070A
C241	ECQS361JZ	360pF 100WV ±5% Styrol	1	
C234	ECQS152KZ	1500pF 100WV ±5% Styrol	1	
C309,310	ECQM05332MZ	0.0033μF 100WV ±20% Styrol	2	
C305,306,320	ECQM05153MZ	0.015μF 50WV ±20% Polyester	3	
C501,502	ECQM05333MZ	0.033μF 50WV ±20% Polyester	2	
C231	ECAG10ER1	0.1μF 10WV Electrolytic	1	
C236	ECAG10ER47	0.47μF 10WV Electrolytic	1	
C307,308	ECAG10ER68	0.68μF 10WV Electrolytic	2	
C302,304	ECEA6V33L	33μF 6.3V Electrolytic	2	
C301	ECEA10V470L	470μF 10WV Electrolytic	1	
C233	ECEA50V1L	1μF 50WV Electrolytic	1	
C242	ECEA16V10L	10μF 16WV Electrolytic	1	
C303	ECEA25V3R3L	3.3μF 25WV Electrolytic	1	
C232	ECEB25V4R7L	4.7μF 25WV Electrolytic	1	
C220	ECEA10V220L	220μF 10WV Electrolytic	1	
(Cassette Circuit)				
C431,432	ECKD1H103ZFZ	0.01μF 50WV +80 −20 % Ceramic	2	
C465,466	ECCD1H180K	18pF 50WV ±10% Ceramic	2	
C407,408	ECCD1H560K	56pF 50WV ±10% Ceramic	2	
C461,462	ECCD1H101K	100pF 50WV ±10% Ceramic	2	
C851,852	ECCD1H181K	180pF 50WV ±10% Ceramic	2	
C403,404 473,474	ECKD1H102PF	0.001μF 50WV +80 −20 % Ceramic	4	
C861	ECKD1H223ZFZ	0.022μF 50WV Ceramic	1	
C856	ECQS1182JZ	1800pF 100WV ±5% Styrol	1	
C425,426	ECQS1152JZ	1500pF 100WV ±5% Styrol	2	
C401,402	ECQM05152MZ	0.0015μF 50WV ±20% Polyester	2	
C409,410,858	ECQM05333MZ	0.033μF 50WV ±20% Polyester	3	
C857	ECQM05104MZ	0.1μF 50WV ±20% Polyester	1	
C427,428	ECQM05102MZ	0.001μF 50WV ±20% Polyester	2	
C423,424	ECQM05332MZ	0.0033μF 50WV ±20% Polyester	2	
C854	ECAG10ER1	0.1μF 10WV Electrolytic	1	
C433,434	ECAG10ER22	0.22μF 16WV Electrolytic	2	
C855	ECAG16ER1	0.1μF 16WV Electrolytic	1	
C429,430,463 464	ECAG10V47L	47μF 10WV Electrolytic	4	
C411–414, 435,469,470	ECAG16V10L	10μF 16WV Electrolytic	7	
C436,853	ECEA16V100L	100μF 16WV Electrolytic	2	
C859,860	ECEA16V220L	220μF 16WV Electrolytic	2	
C437	ECEA16V1000L	1000μF 16WV Electrolytic	1	
C475,476	ECEA10V220L	220μF 16WV Electrolytic	2	
C405,406	ECEA25V4R7G	4.7μF 25WV Electrolytic	2	
C418–422, 471	ECEB6V33L	1μF 50WV Electrolytic	6	
C467,468	ECEB6V33L	33μF 6.3WV Electrolytic	2	
C415,416,417 472	ECEB50V1L	1μF 50WV Electrolytic	4	
(Others)				
C441,442	ECQM05683MZ	0.068μF 50WV 20% Polyester	2	
C4.5	ECEA50Y1	1μF 50WV Electrolytic	1	
C3	ECKDDS101MB	100pF 250WV 20% Ceramic	1	
C2	ECKDDS102MD	0.01μF 250WV 20% Ceramic	1	

REPLACEMENT PARTS LIST

Ref. No.	Part No.	Description	Per set (pcs.)	Remarks
VARIABLE RESISTORS				
VR601–604	EWFNTAK30A54	50k, Bass and Treble Control	2	
VR605,606	EWFNVAK30B54	50k, Volume Control	1	
VR607	EVE2DAK30G15	100k, Balance Control	1	
VR301,302 408	EVLS3AA00B14	10k, Stereo Eye,Separation and Cassette	3	
VR701	EVLS3AA00B52	500Ω, Power Amp. Gain Control	1	
VR851	EVLS3AA00B13	1k, AC Bias OSC Control	1	
VARIABLE CAPACITORS				
	ECV5MD34X53G	Tuning Capacitor	1	
CT3	ECV1ZW10X32	Trimmer Capacitor	1	
CT201–204	SCV2T10S	Trimmer Capacitor	2	
SWITCHES				
S1	ESB1140DS	Power Switch	1	
ST1-9	SSH36	REC/Playback Switch	1	
S6,S3	SSH204	Tape Monitor and Mode Switch	1	
SB1-10	SSR62K	Band Selector Switch	1	ⓚ
SF1–3	ESRJ234K30AE	Function Selector Switch	1	ⓚ
S7	SSH32	Normal-CrO_2 Selector Switch	1	
S2	SSR6	Power Voltage Selector	1	
SPEAKERS				
SP	EAS16PL58S	Woofer, 16cm 8Ω	2	
SP	EAS5PH15SC	Tweeter, 5cm 8Ω	2	
CHASSIS				
CH1	SDT1302K	Tuning Shaft	1	ⓚ
CH2	RDY8	Pulley Shaft	4	
CH3	RDR8-1	Pulley	3	
CH4	RDR14	Pulley	2	
CH5	SHG958	Rubber Cushion, Lamp	2	
CH6	RHG6	Rubber Cushion, Tuning Capacitor	2	
CH7	RHG3-1	Rubber Cushion, Tuning Capacitor	1	
CH8	RDY4	Pulley Shaft	1	
CH9	SDD39-2S	Dial Drum	1	
CH10	RDS309	Drum Spring	1	
CH11	RDZ05-A	Dial Cord	160cm	
CH12	SMX86	Cover, Fiber	1	
CH13	SDP148-1	Dial Pointer	1	
CH14	SMY22	Heat Sink	1	
CH15	XNLS3FP	Speed Nut	2	
CH16	SUD96	Spacer, Mike Jack	1	
CH17	SJJ43	Headphone Jack	1	
CH18	RJJ78	Mike Jack	2	
CH19	SNE420	Nut, Mike Jack	2	
CH20	SJF104	1P Fuse Holder	1	
CH21	RJF7A	Fuse (or Lamp) Holder	10	
CH26	SJR604	Terminal Strip, 6P	1	
CH27	RJR305-1	Terminal Strip, 3P	2	
MC2	SWK94	6P Connector Assembly	1	
MC1	SWK98	4P Connector Assembly	1	
MC3	SWK92	3P Connector Assembly	1	
CH28	SWK80	Receptacle Housing Assembly	1	
CH29	SMA92	FANT Holder	2	
CH30	XTW3+10B	Screw, Bottom Cover Mounting	8	
CH31	XTV3+8B	Screw, Player Mounting	1	
CH32	XTV3+10B	Screw, Bottom Cover Mounting	5	
CH33	SJP2206	Speaker Cord	2	
CH34	SJA46	Power Cord with Plug	1	DEMKO SEMKO NEMKO FINKO
	SJA98	Power Cord with Plug	1	Other
CH35-4	SJS9202-1	Terminal Board, FM ANT	1	SG-1070L
CH35-3	SJS9206-1	Terminal Board AM ANT	1	SG-1070L
CH35-2	SJS6502	DIN 5p Jack	2	SG-1070L
CH35-1	SJS9208	Speaker Connector	4	SG-1070L
CH35	SJF9010	Terminal Board	1	SG-1070A
CH35-5	SJE64	2p Terminal Jack	1	SG-1070A
CH36	SMX88	Switch Cover	1	
CH37	SHR112	Power Cord Holder A	2	
CH38	SHP960	Power Cord Holder B	1	SG-1070LUK
CH39	SUD84	Spacer, Cord Holder	2	SG-1070LUK
CH40	SMN686	Rear Panel, Terminal Indicator	1	SG-1070L
CH40	SMN704	Pear Panel, Terminal Indicator	1	SG-1070A
	SJA68	Power Cord with Plug	1	SEV
	SJA80	Power Cord	1	UK
	SJA88	Power Cord with Plug	1	SEV-2
ACCESSORIES				
A1	WM2201N	Microphone	2	
A2	WN123N	Microphone Stand	2	
A3	SQX5628	Operating Instructions SG-1070L	1	English,French, Germany
	SQX5640	Operating Instructions SG-1070L	1	UK
	SQX5642	Operating Instructions SG-1070L	1	FIN NEM DEM SEM
	SQX5630	Operating Instructions SG-1070A	1	
A4	SPS1HCCNRBZ	Demonstration Tape	1	
PACKING (with Speaker System)				
PA1	SPG1594	Carton	1	
PA2	SPN2124	Filler, Speaker System	1	
PA3	SPN2118	Upper Pad, Center Unit	2	
PA4	SPN2120	Bottom Pad, Center Unit	2	
PA5	SPN2122	Pad, Speaker System	2	
PA6	SPN2128	Turntable Pad	1	
PA7	SPP192-1	Soft Cover	1	
PA8	SPP130	Polyethylene Sheet, Center Unit	1	
PA9	SPP48	Polyethylene Sheet, Speaker System	1	
	SPG1596	Carton	1	IT
(without Speaker System)				
PA1	SPG1600	Carton	1	
PA2	SPN2130	Pad, Center Unit	1	
PA3	SPN2134	Uppen Pad, Center Unit	2	
PA4	SPN2136	Bottom Pad, Center Unit	2	
PA5	SPN2128	Turntable Pad	1	
PA6	SPP192-1	Soft Cover	1	
PA7	SPP130	Polyethylene Sheet, Center Unit	1	
CABINET				
CA1	SGE576	Dust Cover	1	
CA2	SGB528	Badge	1	
CA3	SYK1330	Cabinet, Complete	1	SG-1070A
	SYK1332	Cabinet, Complete	1	UK
CA3	SYK1334	Cabinet, Complete	1	SG-1070L
CA4	SGW3060	Panel	1	SG-1070L
	SGW3061	Panel	1	SG-1070A
CA5	SKD3384	Dial	1	SG-1070L
	SKD3385	Dial	1	SG-1070A
CA6	SKM4640-1	Bottom Cover	1	
CA7	SYU244-2	Bottom Board	1	
CA8	SHS3018	Foot	4	
CA9	SBL34	Hinge	2	
CA10	SGX896	Cassette Trim	1	
CA11	SXE60	Shaft Assembly, Cassette Cover	2	
CA12	SUS122	Spring, right	1	
CA13	SUS124	Spring, left	1	
CA14	SDH94	Reflective Sheet	1	
CA15	SBC158-1	Reset Button	1	
CA16	SKW122	Hinge Holder	2	
CA17	SBN570K	Tuning Knob	1	
CA18	SBN572K-1	V Knob	6	
CA19	SBC148	Push Button A	1	
CA20	SBC150	Push Button B	2	
CA21	SBC156	Push Button C	1	
CA22	SGL74	REC Eye	1	
CA23	SGN2280	Specification Plate	1	
	SGN2282	Specification Plate	1	IT
CA24	SGE584	Cassette Cover	1	
CA26	SUD102	Spacer A, Hinge	2	
CA27	SUD104	Spacer B, Hinge	2	
CA28	SUD106	Spacer C, Hinge	4	
CA30	SKA1183	Speaker Enclosure	2	SG-1070L
	SKA1181	Speaker Enclosure	2	SG-1070LUK
CA23	SGN2283	Specification Plate	1	SG-1070A

REPLACEMENT PARTS LIST

Ref. No.	Part No.	Description	Per set (pcs.)	Remarks
CA31	SYB150	Baffle Board Assembly	2	SG-1070L
CA31	SYB146	Baffle Board Assembly	2	SG-1070LUK
	RGB159A	Badge	2	
CA33	SGN1681	Rear Board, Speaker System	2	
CA34	SGN2180	Name Plate, Speaker System	2	
	SGN2181	Name Plate, Speaker System	2	SG-1070LUK
	SGN2182	Name Plate, Speaker System	2	SG-1070L IT
CA30	SKA1181	Speaker Enclosure	2	SG-1070A
CA31	SYB152	Baffle Board Assembly	2	SG-1070A
CA34	SGN1502	Name Plate, Speaker System	2	SG-1070A
	SGN2300	Name Plate, Speaker System	2	SG-1070L
RECORD PLAYER SP-501B				
1	SJY1002-1	Player Board Assembly	1	
	SJY16	Player Board	1	
	SGK526	Indicator Plate, Speed Change	1	
	SJY9030	Indicator Plate, Auto-cut	1	
	SJY5008	Lift Holder	1	
	SJY5016	Hole Cover	1	
	SUW926	Bracket A	2	
	SUW928	Bracket B	1	
2	SJY5004	Pickup Rest	1	
3	SJY5010	Lifter	1	
4	SJY5012	Knob	1	
5	SJY4004-1	Turntable Mat	1	
6	SJY4	Turntable	1	
7	2E-10T-4P	Phonomotor	1	SG-1070L
	2E-10T3	Phonomotor	1	SG-1070A
8	FFGBS010	Rubber Cushion	1	
9	SHG9068	Rubber Cushion	2	
10	SNW392	Rubber Washer	3	
11	FFIPA006	Idler Wheel	1	
12	SJY12	Selector Lever Assembly	1	
13	SJY9010	Bracket, Selector Lever	1	
14	SJY2	Idler Lever	1	
15	SJY9018	Selector Arm	1	
16	SJY9004	Turntable Shaft	1	
17	SJY9034	Main Gear Shaft	1	
18	SJY9002	Plate, Turntable Shaft	1	
19	SFUG623-1E	Main Gear Assembly	1	
20	SJY6	Operating Plate Assembly	1	
21	FF-MCP0805C	Capstan for 50Hz	1	
	FF-MCP0806C	Capstan for 60Hz	1	
22	SJY9016-1	Switch Lever	1	
23	SFUM623-4E	Pickup Plate	1	
24	SJY9042	Actuating Link	1	
25	SJY9044	Switch Control Plate	1	
26	SJY9046	Switch Control Bracket, Cueing Bracket	2	
27	SJY9048	Stopper, Lift	1	
28	SNE424	Holder, Stopper	1	
29	SFUM623-2	Collar, Operating Plate	1	
30	SJY9052	Feed Link	1	
31	SJY9054	Cut Lever	1	
32	SJY9028	Spring	4	
33	SJY9024	Spring, Idler Pulley	1	
34	SJY9026	Spring, Selector Arm	1	
35	SJY9056	Spring, Pickup Plate	1	
36	SJY9058	Spring A, Lift	1	
37	SJY9060	Spring B, Lift	1	
38	SJY9062	Spring, Operating Plate	1	
39	SJY9064	Spring, Feed Link	1	
40	SNW412-1	Fiber Washer	2	
41	SNW522	Nylon Washer 5φ	2	
42	SNW622-2	Nylon Washer 6φ	1	
43	SNW522-1	Fiber Washer 5φ	1	
44	SNW412	Washer 4φ	2	
45	SNW622-2	Washer 6φ	3	
46	XUC3	Circlip 3φ	4	
47	XUC4	Circlip 4φ	2	
48	XUC5	Circlip 5φ	3	
49	SNE428	Push Nut	8	
50	XXAR3H3	Screw for Capstan	1	

Ref. No.	Part No.	Description	Per set (pcs.)	Remarks
51	XSN3+12S	Screw 3 x 12mm	4	
52	SXN3+5S	Screw 3 x 5mm	2	
53	XTV23+6B	Screw 2.3 x 6mm	1	
54	XTV3+8B	Screw 3 x 8mm	7	
55	XTV3+16B	Screw 3 x 16mm	1	
56	XNG3S	Nut 3m/m	1	
57	XNG4S	Nut 4m/m	2	
58	XWE4F13B	Washer	4	
59	XWE3D8	Washer	4	
60	XWE3E16B	Washer	1	
61	XWE3E10	Washer	2	
62	XWE2.3x6	Washer	1	
63	XWA3B	Washer	1	
64	XWA4B	Washer	1	
65	VF3B20S	Screw	1	
66	SJT202	Lug	1	
67	EPU05STAD	Pickup	1	
	EPC05STAD	Cartridge, Ceramic	1	
	EPS36STSD	Stylus	1	
68	AM9688	Micro Switch	1	
69	SJR402	Terminal Strip, 4P	1	
70	SWK64	PU Plug Assembly	1	
71	ECQW8A103M	0.01μF (SG-1070L)	1	
	ECQB6103MZ	0.01μF (SG-1070A)	1	
72	ERD12TJ100	10Ω	1	
73	SWP50	Receptacle Housing Assembly	1	
74	SGX918	Trim, Turntable Mat	1	SG-1070A
76	FUFAD011	45RPM Adaptor	1	
77	SJY14	Cueing Lever Assembly	1	
78	SJY9068	Spring Plate, Cueing	1	
80	SQX9422	Cueing Label	1	
74	SGX890	Trim, Turntable Mat	1	SG-1070L
CASSETTE TAPE DECK ASSEMBLY (SJD-54)				
2	SMQ1274	Push Button Frame Assembly (w/Button)	1	
3	SYE340	REC Button Assembly	1	
4	SYE342	Button Assembly	6	
5	SMQ922	Reel Holder Assembly	2	
9	SMQ1030	Head Panel	1	
10	SMQ1032	Collar A	1	
11	SMQ38	Pinch Roller Assembly	1	
12	SMQ578	Spring C, Pinch Roller Assembly	1	
13	SMQ42	Stud A	2	
14	SJH14	Erase Head	1	
15	SMQ228	Stud B, Record-Playback Head	1	
16	SMQ230	Stud C, Record-Playback Head	1	
17	SMQ232	Coil Spring A	1	
18	SJH2	Record-Playback Head	1	
19	SMQ52	Spring D, Head Panel Action Bracket	1	
20	SMQ1058	Stop Lever	1	
21	SMQ1060	Spring A, Stop Lever	1	
22	SMQ1038	Brake Arm	1	
23	SMQ166	Spring E, Brake Arm	1	
24	SMQ168	Pivot, Broke Arm	1	
25	SMQ234	REC Safety Lever B	1	
26		Not used		
27	SMQ1278	Eject Lever Assembly (Pop-up Lever Assembly)	1	
28	SMQ240	Spring, Eject Lever	1	
29	SMQ242	Switch Holding Spring Assembly	1	
30	SMQ1250	Counter Assembly	1	
31	SMQ1054	Bracket, Counter	1	
32	SMQ1056	Belt, Capstan	1	
33	SMQ124	Shaft A Assembly	1	
34	SMQ414	Spring Q	1	
35	SMQ482	Flywheel Assembly	1	
36	SMQ244	Bracket Assembly	1	
37	SMQ140	Belt, Capstan	1	
38	SMQ146	Washer, Oil Thrower	2	
39	SMQ58	Actuating Lever "FF"	1	
40	SMQ72	Spring K, Actuating Lever "FF"	1	

REPLACEMENT PARTS LIST

Ref. No.	Part No.	Description	Per set (pcs.)	Remarks
41	SMQ60	Shaft B, Braking Operating Plate	1	
42	SMQ62	Brake Operating Plate	1	
43	SMQ246	FF Idler Assembly	1	
44	SMQ74	Spring L	1	
45	SMQ248	FF Operating Plate	1	
46	SMQ104	Shaft C FF Operating Plate	1	
47	SMQ90	REW Arm Assembly	1	
48	SMQ92	Spring M, REW Arm Assembly	1	
49	SMQ86	Holding Plate, FF Idler Assembly	1	
50	SMQ1230	Take-up Arm Assembly	1	
58	SMQ122	Motor ON-OFF Switch	1	
59	SMQ152	REC Safety Lever A	1	
60	SMQ154	Spring P, REC Safety Lever A	1	
61	SMQ158	REC Safety Spoke	1	
62	MHT-5PS	DC Motor	1	
63	SMQ250	Bracket, DC Motor	1	
64	SMQ198	Pulley, DC Motor	1	
65	XXA2A-3	Screw A, DC Motor	1	
66	SMQ64	Nylon Washer 2ϕ	1	
67	XUCS12	Circlip 1.2m/m	1	
68	XUC15	Circlip 1.5m/m	1	
69	XUCS19	Circlip 1.9m/m	2	
70	XUCS23	Circlip 2.3m/m	1	
71	XWA26B	Spring Washer	3	
72	SMQ1064	Pin, Stop Lever	1	
73	XWE26E13	Spacer B	2	
74	XNG26B	Nut 2.6m/m	2	
75	XSN17+4S	Screw 1.7mm x 4	1	
76	XSN2+12S	Screw 2mm x 12	3	
77	XSN26+3S	Screw 2.6mm x 3	5	
78	XSN26+4S	Screw 2.6mm x 4	12	
79	XSN26+6S	Screw 26mm x 6	6	
80	SMQ1050	Auto Stop Lever Assembly	1	
81		Not used		
82	SMQ258	Spring P, CH	1	
83	SMQ260	Coil Spring	1	
84		Not used		
85	XSN2+5S	Screw 2mm x 5	6	
86	XWA2B	Spring Washer 2ϕ	5	
87	XSN3+4S	Screw 3mm x 4	3	
88	XWE26B	Washer 2.6ϕ	6	

Ref. No.	Part No.	Description	Per set (pcs.)	Remarks
89	XWE2B	Washer 2ϕ	2	
90	XNG2B	Nut 2m/m	2	
91		Not used		
92	XNG26B	Nut 2.6m/m	2	
93	XNB26+12	Screw 2.6mm x 12	2	
94~100		Not used		
101	SMQ1248-1	Counter Plate	1	
102	SMQ1280	Chassis Bracket A	1	
103	SMQ1282	Chassis Bracket B	1	
104	SUW930	Cassette Bracket	1	
105	SMQ1284	Lock Lever	1	
106	SMQ1286	Kick Lever	1	
107	SMQ1288	Bracket, Pause	1	
108	SMQ1290	Pause Slide Lever	1	
109	SMQ1292	Pause Actuating Cam	1	
110	SMQ1294	Spring, Cam	1	
111	SMQ1296	Stud for PCB	3	
112	SMC6046	Shield Paper	1	
113	SMQ1298	R/P Switch	1	
114	SMQ1300	Lead Holder	2	
115	XNSS9BN	Nut	1	
116	XSN3+8S	Screw 3mm x 8	1	
117	SMQ1302	Spacer	2	
118	XWE26E10	Washer 2.6ϕ	1	
119	SMQ1304	Spring, Kick Lever	1	
120		Not used	1	
121	XTV3+8B	Self Tapping Screw	1	
122	SMQ106	Spring, Take-up Pulley	1	
123	XUC2	Circlip 2m/m	2	
124	SMQ1306	Spring A, Lock Lever	1	
125	SMQ1306	Spring B, Lock Lever	1	
126	SMQ1310	Stud	1	
127	SMQ1314	Spring Plate, Push Button Frame	1	
128	SMQ168	Brake Arm Pivot	1	
129	XNGS26AB	Nut	1	
130	SMQ1316	Collar, Auto Stop Lever	2	
131	SMQ1276	Collar B, Head Panel	2	
132	SNM194	Bracket, Mike Jack	1	
133	SMN696	Bracket, Switch	1	
134	SUD96	Spacer, Mike Jack	1	
135	SMQ1342	Belt Holder	1	

* Note: For SG-1070L NEMKO

Ref. No.	Part No.	Description
	SLA1C2M	LW Antenna Coil
	SLF2G2	MW Antenna Coil
R260	ERD14TJ101	100Ω
C250	ECQS1472KZ	4700pF
	SQX9442	Operating Instructions